## **ABSTRACT**

## bioMérieux

Method for detecting the activatable free form of PSA and the use thereof for diagnosing benign pathologies of the prostate and adenocarcinoma of the prostate

The present invention relates to a method for the *in vitro* diagnosing of a benign pathology of the prostate or of an adenocarcinoma of the prostate, characterized in that it comprises the step consisting of detection, in a biological sample from a patient suspected of suffering from a benign pathology of the prostate or from an adenocarcinoma of the prostate, of the activatable free form of PSA.

This method of diagnosis can be carried out by means of the steps consisting in:

- i) bringing a binding partner capable of binding specifically to activatable free PSA into contact with a biological sample from a patient suspected of suffering from a benign pathology of the prostate or of an adenocarcinoma of the prostate,
- ii) demonstrating the capture of the activatable free form of PSA by said binding partner,
- iii) calculating the ratio of the amount of activatable free form of PSA detected in step ii) to the amount of a form of PSA other than the activatable free form, present in a sample of the same nature taken from the same individual, and
- iv) determining whether the patients are suffering from an adenocarcinoma of the prostate or from a benign pathology of the prostate by comparing the value of the ratio determined in step iii) with a predetermined threshold value, chosen according to the type of ratio used and representative of the detection limit of each pathology.